

ATTACHMENT 12

State of Kansas



Department of Health and Environment

James J. O'Connell, Secretary

April 14, 1997

Mr. David Duke
Quality Control Manager
Air Capitol Plating, Inc.
1702 S. Knight Street
Wichita, Kansas 67213

Re: Air Emission Source Construction Approval
Source ID No.: 1730152

Dear Mr. Duke:

Enclosed is the Air Emission Source Construction Approval for the ^{5,6,7} spray booths to be installed at Air Capitol Plating, Inc. in Wichita, Kansas.

The facility is an existing major source subject to 40 CFR Part 63, Subpart GG-Aerospace Manufacturing and Rework Facilities promulgated on September 1, 1995. Since EPA has the authority for this subpart at this time, contact Richard Tripp at (913) 551-7566 if you have any questions regarding this rule.

Please review the approval carefully because the approval obligates the source to certain requirements.

The source I.D. Number cited above should be included in all communications with KDHE in reference to this approval.

Notify the Air Quality Representative, Fred Spencer, in the Wichita-Sedgwick County Department of Community Health at (316) 268-8448 when the operation has commenced so that an evaluation can be conducted.

If you have any questions about this approval, please call me at (913) 296-6427. Your cooperation with the air quality program in Kansas is appreciated.

Sincerely,

Daizy Dandass

Daizy Dandass
Engineering Associate
Air Permit Section
Bureau of Air and Radiation

DD: lsb/049771

c: Fred Spencer
NPL#: 97-93



Department of Health and Environment

James J. O'Connell, Secretary

**AIR EMISSION SOURCE
CONSTRUCTION APPROVAL**

Source ID No.: 1730152

Effective Date: April 14, 1997

Source Name: Air Capitol Plating, Inc.

SIC Code: 3471, Electroplating, Plating, Polishing, Anodizing, and Coloring

Source Location: 1702 S. Knight Street
Wichita, Kansas 67213
Sedgwick County

Mailing Address: 1702 S. Knight Street
Wichita, Kansas 67213
Sedgwick County

Contact Person: David Duke
Quality Control Manager
Telephone No. (316) 943-0731

This approval is issued pursuant to K.S.A. 65-3008 as amended.

Description of Activity Subject to Air Pollution Control Regulations

Air Capitol Plating, Inc. is proposing to add three spray booths at their facility in Wichita, Kansas.

Emissions of volatile organic compounds (VOCs) were evaluated as part of the review of this application. This project is subject to the provisions of K.A.R. 28-19-300 (Construction Permits and Approvals; Applicability) because the potential-to-emit of VOCs exceeds the level at which an approval is required.

Significant Applicable Air Regulations

The painting operation, as proposed, is subject to regulations relating to air pollution control. The following regulation was determined to be applicable to this source:

1. 40 CFR Part 63, Subpart GG - National Emission Standards for Hazardous Air Pollutants (NESHAPs) for the Aerospace Manufacturing and Rework Industry.

Air Emission Unit Technical Specifications

The following equipment or equivalent is approved:

1. Three (3) Binks Model No. IDB168F spray booths 8 feet high, 16 feet wide and 8 feet deep numbered 5 through 7.

Air Emissions Estimates from the Proposed Activity

POLLUTANT TYPE	POTENTIAL-TO-EMIT ¹ (Tons per Year)	ESTIMATED OPERATING EMISSIONS ² (Tons per Year)
Volatile Organic Compounds (VOCs)	12	4

Notification

1. Notify the Air Quality Representative in the Wichita-Sedgwick County Department of Community Health at (316) 268-8448 when the operation has started so that an evaluation can be conducted.

¹ Potential-to-emit means the maximum capacity of a stationary source to emit a pollutant under its physical and operational design. Any physical or operational limitation on the capacity of the source to emit a pollutant, including air pollution control equipment and restrictions on hours of operation or on the type or amount of material combusted, stored, processed, shall be treated as part of its design if the limitation or the effect it would have on emissions is federally enforceable.

² Estimated operating emissions are the emissions of a pollutant from a stationary source based on expected hours and conditions of operations.

General Provisions

1. This document shall become void if the construction or modification has not commenced within 18 months of the effective date, or if the construction or modification is interrupted for a period of 18 months or longer.
2. A construction permit or approval must be issued by KDHE prior to commencing any construction or modification of equipment or processes which results in potential-to-emit increases equal to or greater than the thresholds specified at K.A.R. 28-19-300.
3. Upon presentation of credentials and other documents as may be required by law, representatives of the KDHE (including authorized contractors of the KDHE) shall be allowed to:
 - a. enter upon the premises where a regulated facility or activity is located or conducted or where records must be kept under conditions of this document;
 - b. have access to and copy, at reasonable times, any records that must be kept under conditions of this document;
 - c. inspect, at reasonable times, any facilities, equipment (including monitoring and control equipment), practices, or operations regulated or required under this document; and
 - d. sample or monitor, at reasonable times, for the purposes of assuring compliance with this document or as otherwise authorized by the Secretary of the KDHE, any substances or parameters at any location.
4. The emission unit or stationary source which is the subject of this document shall be operated in compliance with all applicable requirements of the Kansas Air Quality Act and the federal Clean Air Act.
5. This document is subject to periodic review and amendment as deemed necessary to fulfill the intent and purpose of the Kansas Air Quality Statutes and Regulations.
6. This document does not relieve the permittee of the obligation to obtain other approvals, permits, licenses, or documents of sanction which may be required by other federal, state, or local agencies.

Approval Issuing Engineer

Daizy Dandass
Daizy Dandass
Engineering Associate
Bureau of Air and Radiation

4/14/97
Date Signed

DD:lsb/049772

c: Fred Spencer
NPL 97-93



May 9, 1997

David Duke, Quality Control Manager
Air Capitol Plating, Inc.
1702 So. Knight
Wichita, Kansas 67213

P/N 1730152

Dear Sir:

The report of New or Modified Source that you submitted in accordance with the provisions of K.A.R. 28-19-300 Reporting Required which was received by the Kansas Department of Health and Environment contained information regarding the installation of three(3) spray painting booths at your Wichita facility.

The following equipment was approved for operation:


Three (3) Binks Model No. IDB168F spray booths 8 feet high , 16 feet wide and 8 feet deep. These units are located in Painting Room #1, and are now designated as #1-#2-#3. Emissions are controlled by 2 stage dry filters.

On May 9, 1997 I conducted an inspection of the completed installation. The inspection verified that the equipment was installed as approved. In accordance with K.A.R. 28-19-50(B) a series of 25 opacity readings were taken on the exhaust stack emissions of booth #1 for an average of 0.0%, which demonstrates compliance with applicable regulations.

This equipment is also subject to 40 CFR 63 Subpart GG- Aerospace Manufacturing and Rework Facilities promulgated on September 1, 1995. At this time Subpart GG is a Federal program only. Questions regarding this regulation should be addressed to EPA.

If you have any questions regarding this matter, please contact me at 268-8448.

Sincerely,


Fred Spencer, Air Quality Technician

cc: Don Schuyler, KDHE
NPL 97-93 ✓



KANSAS DEPARTMENT OF HEALTH AND ENVIRONMENT

BUREAU OF AIR AND RADIATION

INITIAL INSPECTION/EVALUATION FORM

Source ID No.: 1730152
Source Name: Air Capitol Plating, Inc.
Source Location: 1702 S. Knight Street
Wichita, Kansas 67213

I. Equipment Description and Operations Performed:

Type	Control Equipment
Three Binks Model No. IDB168F spray booths 8 feet high, 16 feet wide and 8 feet deep	2 LARGE DRY FILTER

BOOTHS ARE SET UP TO INCORPORATE 3 LARGE FILTERS.
IF REQUIRED

Is the above information consistent with the equipment used? Yes ☒; No ☐

II. Opacity of Visible Emissions

PAINT ROOM #1

SOURCE	OPACITY LIMIT (%)	OPACITY OBSERVED (%)
Binks spray booth #1 (W)	<20 ¹	0
Binks spray booth #2 (MID)	<20	NOT OPERATING
Binks spray booth #3 (E)	<20	NOT OPERATING

¹Reference K.A.R. 28-19-50(B)

III. Comments:

(Please provide a brief summary for the item above if the response is "No".)

Inspector's Name: FRED SPENCER
(Print)

Signature: Tulip AQT

Date of Inspection: 5-9-97



KANSAS DEPARTMENT OF HEALTH AND ENVIRONMENT

BUREAU OF AIR AND RADIATION

INITIAL INSPECTION/EVALUATION FORM

Source ID No.: 1730152
Source Name: Air Capitol Plating, Inc.
Source Location: 1702 S. Knight Street
Wichita, Kansas 67213

I. Equipment Description and Operations Performed:

Type	Control Equipment
Three Binks Model No. IDB168F spray booths 8 feet high, 16 feet wide and 8 feet deep	

Is the above information consistent with the
equipment used? Yes___; No___

II. Opacity of Visible Emissions

SOURCE	OPACITY LIMIT (%)	OPACITY OBSERVED (%)
Binks spray booth #5	< 20 ¹	
Binks spray booth #6	< 20	
Binks spray booth #7	< 20	

¹Reference K.A.R. 28-19-50(B)

III. Comments:

(Please provide a brief summary for the item above if the response is "No".)

Inspector's Name: _____ **Signature:** _____

(Print)

Date of Inspection: _____

**KANSAS****DEPARTMENT OF HEALTH & ENVIRONMENT**

BILL GRAVES, GOVERNOR

Gary R. Mitchell, Secretary

MAY 4 1999

April 28, 1998

~~Mr. David Duke~~

Quality Control Manager
Air Capitol Plating, Inc.
1702 S. Knight Street
Wichita, Kansas 67213

Re: Air Emission Source Construction Permit
Source ID No.: 1730152

Dear Mr. Duke:

Enclosed is the Air Emission Source Construction Permit for the spray booths to be installed at Air Capitol Plating, Inc. in Wichita, Kansas.

Please review the permit carefully because the permit obligates Air Capitol Plating, Inc. to certain requirements.

Since the facility is an existing major source, it is subject 40 CFR Part 63, Subpart GG - National Emission Standards for Hazardous Air Pollutants (NESHAPs) for the Aerospace Manufacturing and Rework Industry. The facility will have to comply with these standards by September 1, 1998.

The source I.D. Number cited above should be included in all communications with KDHE in reference to this permit.

Notify the Air Quality Representative, John Stark, in the Wichita-Sedgwick County Department of Community Health at (316) 268-8448 when the operation has commenced so that an evaluation can be conducted.

Contact Leo Haynos, Technical Services Section, Forbes Field, Bldg 283, Topeka, Kansas 66620 at (785) 296-6421 at least thirty (30) days in advance of the date Air Capitol Plating, Inc. wishes to conduct the performance test so arrangements may be made for a representative of the department to be present for the test.

If you have any questions about this permit, please call me at (913) 296-6427. Your cooperation with the air quality program in Kansas is appreciated.

Sincerely,

Daizy Dandass
Daizy Dandass
Engineering Associate
Air Permit Section
Bureau of Air and Radiation

DD:pek

c: John Stark ✓
NPL#: 98-53

Forbes Field, Building 283
(785) 296-1570

Printed on Recycled Paper

Topeka, KS 66620-0001
FAX (785) 291-3953

**KANSAS****DEPARTMENT OF HEALTH & ENVIRONMENT****BILL GRAVES, GOVERNOR****Gary R. Mitchell, Secretary****AIR EMISSION SOURCE
CONSTRUCTION PERMIT**

Source ID No.: 1730152

Effective Date: April 28, 1998

Source Name: Air Capitol Plating, Inc.

SIC Code: 3471, Electroplating, Plating, Polishing, Anodizing, and Coloring

Source Location: 1702 S. Knight Street
Wichita, Kansas 67213
Sedgwick County

Mailing Address: 1702 S. Knight Street
Wichita, Kansas 67213
Sedgwick County

Contact Person: David Duke
Quality Control Manager
Telephone No. (316) 943-0731

This approval is issued pursuant to K.S.A. 65-3008 as amended.

Description of Activity Subject to Air Pollution Control Regulations

Air Capitol Plating, Inc. is proposing to add three spray booths at their facility in Wichita, Kansas.

Emissions of volatile organic compounds (VOCs) and hazardous air pollutants (HAPs) were evaluated as part of the review of this application. This project is subject to the provisions of K.A.R. 28-19-300 (Construction Permits and Approvals; Applicability) because the potential-to-emit of HAPs exceeds the level at which a permit is required.

Significant Applicable Air Regulations

The painting operation, as proposed, is subject to regulations relating to air pollution control. The following regulation was determined to be applicable to this source:

1. K. A. R. 28-19-750 Hazardous Air Pollutants; Maximum Achievable Control Technology, which adopts by reference 40 CFR Part 63, Subpart GG - National Emission Standards for Hazardous Air Pollutants (NESHAPs) for the Aerospace Manufacturing and Rework Industry.

Air Emission Unit Technical Specifications

The following equipment or equivalent is approved:

1. Three (3) JBI Model No. IDB-128-3 Serial # 22121 spray booths 8 feet high, 12 feet wide and 12 feet deep numbered 8 through 10.

One three-stage dry particulate filter.

Air Emissions Estimates from the Proposed Activity

Pollutant Type	Potential-To-Emit ¹ (Tons per Year)	
	Prior to controls	After controls
Volatile Organic Compounds (VOCs)	36	36
Hazardous Air Pollutants (HAPs)	36	1

Compliance Provisions

1. Organic HAP emissions from the primer shall be limited to an organic HAP content level of no more than 350 g/l (2.9 lbs/gal) of primer (less water) as applied.
2. The VOC emissions from the primer shall be limited to a VOC content level of no more than 350 g/l (2.9 lbs/gal) of primer (less water and exempt solvents) as applied.
3. Organic HAP emissions from topcoats shall be limited to an organic HAP content level of no more than 420 g/l (3.5 lb/gal) of coating (less water) as applied. Organic HAP emissions from self-priming topcoats shall be limited to an organic HAP content level of no more than 420 g/l (3.5 lb/gal) of self-priming topcoat (less water) as applied.

¹ Potential-to-emit means the maximum capacity of a stationary source to emit a pollutant under its physical and operational design. Any physical or operational limitation on the capacity of the source to emit a pollutant, including air pollution control equipment and restrictions on hours of operation or on the type or amount of material combusted, stored, processed, shall be treated as part of its design if the limitation or the effect it would have on emissions is federally enforceable.

4. VOC emissions from topcoats shall be limited to a VOC content level of no more than 420 g/l (3.5 lb/gal) of coating (less water and exempt solvents) as applied. VOC emissions from self-priming topcoats shall be limited to a VOC content level of no more than 420 g/l (3.5 lb/gal) of self-priming topcoat (less water and exempt solvents) as applied.
5. The owner shall comply with the following requirements to control the emissions:
 - i. Controlled coatings-control system requirements - Each control system shall reduce the operation's organic HAP and VOC emissions to the atmosphere by 81% or greater, taking into account capture and destruction or removal efficiencies.
 - ii. To comply with Compliance Provisions 1-4, the facility shall perform the following by themselves or in conjunction with one another:
 - a. Use primers and topcoats with HAP and VOC content levels equal to or less than the limits specified in Compliance Provisions 1-4
 - b.
 - i. Use any combination of primers or topcoats such that the monthly volume-weighted average organic HAP and VOC contents of the combination of primers or topcoats comply with the specified content limits.
 - ii. Averaging primers together with topcoats is prohibited under this MACT.
 - iii. Averaging is allowed only for uncontrolled primers or topcoats.
6. The owner shall comply with the following requirements to control the inorganic HAP emissions:
 - i. Apply the coatings in a booth or a hangar in which air flow is directed onto or across the part or assembly being coated and exhausted through one or more outlets.
 - ii. Control the air stream from this operation as follows:
 - a. For existing sources, pass the air stream through either a dry particulate filter system or a waterwash system before exhausting it to the atmosphere.
 - b. Waterwash booths shall remain in operation during all coating application operations.
 - c. Dry filter booths shall include two-stage filter systems or the equivalent, as determined by the permitting agency.

- d. If a dry particulate filter system is used, the following requirements shall be met:
 - A. Maintain the system in good working order;
 - B. Install a differential pressure gauge across the filter banks;
 - C. Continuously monitor the pressure drop across the filter; and
 - D. Take corrective action when the pressure drop exceeds or falls below the filter manufacturer's recommended limit(s).
 - e. If a waterwash system is used, continuously monitor the water flow rate.
 - iii. If the pressure drop across the dry particulate filter system, as recorded pursuant to § 63.752(d)(1), is outside the limit(s) specified by the filter manufacturer or in locally prepared operating procedures, shut down the operation immediately and take corrective action. If the water path in the waterwash system fails the visual continuity/flow characteristics check, or the water flow rate recorded pursuant to § 63.752(d)(2) exceeds the limit(s) specified by the booth manufacturer or in locally prepared operating procedures, or the booth manufacturer's or locally prepared maintenance procedures for the filter or waterwash system have not been performed as scheduled, shut down the operation immediately and take corrective action. The operation shall not be resumed until the pressure drop or water flow rate is returned within the specified limit(s).
7. The primer/topcoat shall be applied using one or more of the application techniques specified below:
- i. Flow/curtain coat application
 - ii. Dip coat application
 - iii. Roll coating
 - iv. Brush coating
 - v. Cotton-tipped swab application
 - vi. Electrodeposition (dip) coating
 - vii. High volume low pressure (HVLP) spraying
 - viii. Electrostatic spray application
 - ix. Other coating application methods that achieve emission reductions equivalent to HVLP or electrostatic spray application methods, as determined according to the requirements in §63.750(i).

Equipment modified by the facility shall maintain a transfer efficiency equivalent to HVLP and electrostatic spray application techniques.

Permit Conditions

- 1. The dry particulate filter shall be operating at all times the spray paint booth is in operation.

Initial Performance Test

The owner or operator shall conduct an initial performance test to demonstrate compliance with the overall reduction efficiency. The initial test shall be conducted according to the procedures and test methods specified in §63.7 and §63.750(h).

Monitoring Requirements

The owner or operator shall continuously monitor the pressure drop across the dry particulate system.

Recordkeeping Requirements

The owner or operator required to comply with the organic HAP and VOC content limits shall record the information as follows:

1. The name and VOC content as received and as applied of each primer and topcoat used at the facility.
2. For uncontrolled primers (organic HAP content less than 350 g/l (2.9 lb/gal) less water as applied and VOC content less than 350 g/l (2.9 lb/gal) less water and exempt solvents as applied):
 - i. The mass of organic HAP emitted per unit volume of coating as applied (less water) (H_i) and the mass of VOC emitted per unit volume of coating as applied (less water and exempt solvents) (G_i) for each coating formulation within each coating category used each month (as calculated using the procedures specified in § 63.750(c) and (e));
 - ii. All data, calculations, and test results (including EPA Method 24 results) used in determining the values of H_i and G_i ; and
 - iii. The volume (gal) of each coating formulation within each coating category used each month.

Notification

Notify the Air Quality Representative in the Wichita-Sedgwick County Department of Community Health at (316) 268-8448 when the operation has started so that an evaluation can be conducted.

General Provisions

1. This document shall become void if the construction or modification has not commenced within 18 months of the effective date, or if the construction or modification is interrupted for a period of 18 months or longer.

2. A construction permit or approval must be issued by KDHE prior to commencing any construction or modification of equipment or processes which results in potential-to-emit increases equal to or greater than the thresholds specified at K.A.R. 28-19-300.
3. Upon presentation of credentials and other documents as may be required by law, representatives of the KDHE (including authorized contractors of the KDHE) shall be allowed to:
 - a. enter upon the premises where a regulated facility or activity is located or conducted or where records must be kept under conditions of this document;
 - b. have access to and copy, at reasonable times, any records that must be kept under conditions of this document;
 - c. inspect, at reasonable times, any facilities, equipment (including monitoring and control equipment), practices, or operations regulated or required under this document; and
 - d. sample or monitor, at reasonable times, for the purposes of assuring compliance with this document or as otherwise authorized by the Secretary of the KDHE, any substances or parameters at any location.
4. The emission unit or stationary source which is the subject of this document shall be operated in compliance with all applicable requirements of the Kansas Air Quality Act and the federal Clean Air Act.
5. This document is subject to periodic review and amendment as deemed necessary to fulfill the intent and purpose of the Kansas Air Quality Statutes and Regulations.
6. This document does not relieve the permittee of the obligation to obtain other approvals, permits, licenses, or documents of sanction which may be required by other federal, state, or local agencies.

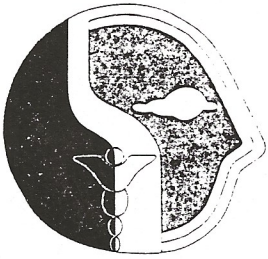
Permit Engineer

Daizy Dandass
Daizy Dandass
Engineering Associate
Bureau of Air and Radiation

DD:pek

c: John Stark
NPL 98-53

4/28/98
Date Signed



uv
July 1, 1998

Curt Howell
Air Capitol Plating
1702 S. Knight
Wichita, Ks 67213

P/N 1730152

Mr. Howell:

The report of New or Modified Source that you submitted in accordance with the provisions of K.A.R. 28-19-300 Reporting Required was received by the Kansas Department of Health and Environment. This report contained information regarding the installation of process equipment at your plating and spray painting facility in Wichita.

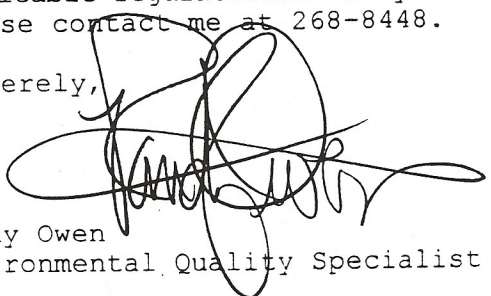
The following equipment was approved for operation:

- three JBI model #IDB-128-3 spray booths, designated as booths 8, 9, and 10 equipped with dry particulate filters.

Since this facility is an existing major source, it is subject to 40 CFR part 63, subpart GG - Aerospace NESHAP. The standards as set forth are to be complied with by September 1, 1998. Please remember you are required to schedule a performance test for these installations and to notify Leo Haynos, KDHE-Technical Services, thirty days in advance of the date of the test.

On June 24 and June 30, 1998, I conducted an inspection of the installations. This inspection verified that the equipment was installed as approved and records were being maintained as required. The Department will continue to observe the equipment to verify compliance with all applicable regulations. If you have any questions regarding these matters, please contact me at 268-8448.

Sincerely,



Randy Owen
Environmental Quality Specialist

cc: KDHE, Bureau of Air Quality-Topeka
NPL# 98-53

Wichita-Sedgwick County Department of Community Health

1900 East Ninth Street-Wichita, Kansas 67214-3198 • (316) 268-8351 • Fax (316) 268-8390



KANSAS DEPARTMENT OF HEALTH AND ENVIRONMENT

BUREAU OF AIR AND RADIATION

INITIAL INSPECTION/EVALUATION FORM

Source ID No.: 1730152
Source Name: Air Capitol Plating, Inc.
Source Location: 1702 S. Knight Street
Wichita, Kansas 67213

I. Equipment Description and Operations Performed:

Type	Control Equipment
Three JBI Model No. IDB-128-3 spray booths 8 feet high, 12 feet wide and 12 feet deep	Dry particulate filter

Is the above information consistent with the equipment used? Yes ☒; No ☐

II. Opacity of Visible Emissions

SOURCE	OPACITY LIMIT (%)	OPACITY OBSERVED (%)
JBI spray booth #8	< 20 ¹	0
JBI spray booth #9	< 20	—
JBI spray booth #10	< 20	0

¹Reference K.A.R. 28-19-50(b)

III. Record Keeping Requirements

Are records of following being kept at the facility:

- i. The name and VOC content as received and as applied of each primer.....Yes ☒; No ☐
- ii. For uncontrolled primers:
 - a. The mass of organic HAP emitted per unit volume of coating as applied (less water) (Hi) and the mass of VOC emitted per unit volume of coating as applied (less water and exempt solvents) (Gi) for each coating formulation within each coating category used each month.....Yes ☒; No ☐
 - b. All data, calculations, and test results (including EPA Method 24 results) used in determining the values of Hi and Gi.....Yes ☒; No ☐
 - c. The volume (gal) of each coating formulation within each coating category used each month.....Yes ☒; No ☐

IV. Monitoring Requirements

Is the pressure drop being monitored continuously across the dry particulate filter?.....Yes ☒; No ☐

V. Performance Testing

Has the source finalized the performance test schedule?.....Yes ☐; No ☒

If the performance test schedule has been finalized, has the Technical Services Section been notified of the schedule?.....Yes ☐; No ☒ N/A

VI. Comments:

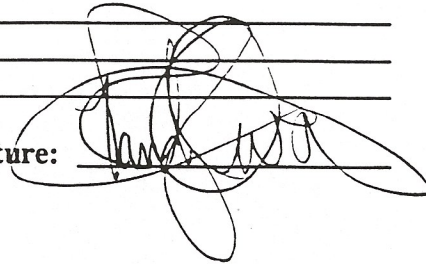
(Please provide a brief summary for the item above if the response is "No".)

- utilizing ~~stippable~~ stippable booth coverings

Inspector's Name:

RANNY OWEN

Signature:



Date of Inspection:

6/24/98 (Print)

CALCULATIONS

Source Name: Air Capitol Plating, Inc.

Source ID Number: 1730152

Information retrieved from the Notification form and MSDS:

Materials Used at the facility	Annual Coating Usage(gal/yr)	Coating Density (lb/gal)	Operating Hours (hrs coating applied/yr)	Annual Coating Usage/Operating Hrs (gal/hr)	VOC Content (lb/gal)
Waterborne Epoxy Primer	8580	9.6	3025	2.83	2.83

VOC emissions calculated from the above data:

3-stage filter efficiency: 98%

Pre-Permit

VOCs = $2.83 \text{ lb/gal of VOCs} * 2.83 \text{ gal/hr} * 8760 \text{ hrs/yr} * 1/2000 \text{ tons/lb} = 35.1 \text{ tons/yr}$

HAPs = $2.83 \text{ lb/gal} * 30\% \text{ of Strontium Chromate} * 9.6 \text{ lb/gal} * 8760 \text{ hrs/yr} * 1/2000 \text{ tons/lb} = 35.8 \text{ tons/yr}$

Post-Permit

HAPs = $35.8 - (.98 * 35.8) = 0.716 \text{ tons/yr}$

ATTACHMENT 13

AIR EMISSION SOURCE
CONSTRUCTION APPROVAL

Permit No. 1730152

Effective Date: March 16, 1994

Source Name: Air Capitol Plating, Inc.

Source Location: 1702 S. Knight Street, Wichita, Kansas

Mailing Address: 1702 S. Knight Street, Wichita, Kansas 67213

Contact Person: David C. Duke
Telephone No. (316) 943-0731

Project Description

Air Capitol Plating, Inc. intends to install and operate a burn-out oven (incinerator) for the purpose of destroying used filters associated with their surface coating operations.

Significant Applicable Air Emission Regulations

The incinerator, as proposed, is subject to Kansas Administrative Regulations relating to air pollution control. The following air pollution regulations were determined to be applicable to this source:

1. K.A.R. 28-19-8 Reporting Required: "Any person who proposes to construct, alter, use or operate any processing machine, equipment, device or other article, or any combination thereof, that is capable of emitting any potential contaminant emissions equal to or in excess of levels specified in K.A.R. 28-19-8(b) of this regulation, shall report this proposed activity to the department."
2. K.A.R. 28-19-40 et seq. Incinerator Emissions: Stipulates requirements of an approvable incinerator.

Air Emission Source Classification

This facility is source type B (potential and actual emissions of all regulated pollutants are estimated to be less than 100 tons per year). The Standard Industrial Classification code number is 3471, Electroplating Plating, Polishing, Anodizing and Coloring.

Approval Application History

The Report of New or Altered Source for this incinerator was submitted to the Kansas Department of Health and Environment on March 9, 1994.

Air Emission Unit Technical Specifications

One Armature Coil Equipment, Inc. Model 240-RKG incinerator, rated capacity of 40 pounds per hour, primary and secondary burners natural gas fueled, each rated 0.625×10^6 BTU per hour, for burning of used filters associated with surface coating operations.

Air Emission Limitations

1. Information in the KDHE files indicates that this incinerator is capable of complying with the 0.3 grain particulate per dry standard cubic foot, corrected to 12% carbon dioxide, limitation of K.A.R. 28-19-41(A) Restriction of Emissions when burning the waste material and at a rate for which it was designed.
2. This incinerator will be subject to the 20% opacity limitation of K.A.R. 28-19-41(B) and will be inspected periodically by a representative of the Wichita-Sedgwick County Department of Community Health (W-SCDCH) to verify compliance with the regulation.

Approval Conditions

1. K.A.R. 28-19-40(D) Incinerator Emissions - General Provisions requires instructions for proper operation of the incinerator be posted in a conspicuous location near the incinerator.
2. This approval does not relieve you of the responsibility for obtaining other approvals which may be required by other federal, state or local government agencies.

Notification

Notify George Huenergardt, the Air Quality Environmentalist in the W-SCDCH at (316) 268-8449 when installation of this incinerator is complete so that an evaluation can be conducted to verify compliance with applicable regulations.

Inspection and Entry Requirements

Upon presentation of credentials and other documents as may be required by law, the permittee shall allow a representative of the KDHE (including authorized contractors of the KDHE) to perform the following:

1. enter upon the permittee's premises where a regulated facility or activity is located or conducted or where records must be kept under conditions of the permit;
2. have access to and copy, at reasonable times, any records that must be kept under conditions of the permit;
3. inspect at reasonable times, any facilities, equipment (including monitoring and control equipment) practices or operations regulated or required under the permit; and
4. sample or monitor, at reasonable times, for the purposes of assuring permit compliance or as otherwise authorized by the Secretary of the KDHE, any substances or parameters at any location.

Permit Issuing Engineer

L. C. Hinthier
Environmental Engineer
Bureau of Air and Radiation

Date Signed

LCH:tam
NPL 94-77

ATTACHMENT 14

Initial Statement of Compliance
Per 40 CFR 63.468 (d) of the Halogenated Solvent MACT Standard
Date of Report: May 1, 1998
Solvent Cleaning Machine #1

RECEIVED

MAY 19 1998

The name and address of the owner/operator :

Air Capitol Plating Inc.
1702 S. Knight
Wichita, KS 67213
(316) 943-0731
Contact: Curtis Howell

AIR, RCM & TOXICS DIVISION

The address and physical location of the solvent cleaning machine. The address is the same as shown above. Refer to the attached map for the actual physical location. This is referred to as vapor degreaser #1.

A list of the control equipment used to achieve compliance for each solvent cleaning machine.

This machine is a vapor degreaser utilizing trichloroethylene as the degreasing solvent. Control equipment and methods are as follows: primary condensing coils, FRD (freeboard refrigeration device), freeboard ratio of 1.0, hoist with lifting speed limited to less than 11 feet per minute, device to shut off sump heat when vapors get too high, device to shut off sump heat when liquid level drops to coils, and reduced room draft.

List of control equipment required to be monitored, a list of the parameters that are monitored and the values of these parameters measured on or during the first month after the compliance date:

The control equipment and methods requiring monitoring are: the FRD, the hoist, and the reduced room draft. The parameters to be monitored are: temperature at the midpoint of the FRD blanket (must be less than 30% of solvent boiling point, i.e., must be less than 56.7 degrees F), lifting speed of the hoist (must be less than 11 FPM), and reduced room draft (velometer readings must show average air movement of less than 50 FPM).

The values of these parameters measured on or during the first month after the compliance date or at a later date (in which case an explanation is offered as a footnote) are shown in table form on the next page.

Prepared with the assistance of:

Milestones Environmental
3308 S. Knight
Wichita, KS 67217
(316) 529-4518

VAPOR DEGREASER #1

DATE	WEEKLY ROOM PARAMETERS	WEEKLY FRD AIR BLANKET TEMP (F)	MONTHLY HOIST SPEED (<11 FT/MIN)	QUARTERLY WINDSPEED (<50 FT/MIN)	
12/01/97				48	
12/19/97	OK	*			
01/05/98	OK	*	9.40		
01/12/98	OK	*			
01/19/98	OK	*			
01/26/98	OK	*			
02/02/98	OK	*	9.20		
02/09/98	OK	*			
02/16/98	OK	*			
02/23/98	OK	*			
03/02/98	OK	*	9.30	47	
03/09/98	OK	*			
03/16/98	OK	*			
03/23/98	OK	53.40			
03/30/98	OK	49.80			
04/06/98	OK	50.30	9.10		
04/13/98	OK	51.80			
04/20/98	OK	51.20			
04/27/98	OK	50.30			

* Temperature readings did not commence until March 23, 1998, because we were awaiting a ruling from John Ramsey, KDHE, on the appropriate point at which to take the reading.

Conditions to maintain the wind speed requirements of Sec. 63.463(e)(2)(ii).

The overhead door just to the east-northeast of this degreaser is kept normally closed.

Prepared with the assistance of:

Milestones Environmental
3308 S. Knight
Wichita, KS 67217
(316) 530-4510

1730152

Initial Statement of Compliance
Per 40 CFR 63.468 (d) of the Halogenated Solvent MACT Standard
Date of Report: May 1, 1998
Solvent Cleaning Machine #2

RECEIVED

MAY 19 1998

The name and address of the owner/operator :

Air Capitol Plating Inc.
1702 S. Knight
Wichita, KS 67213
(316) 943-0731
Contact: Curtis Howell

AIR, RCM & TOXICS DIVISION

MAY 1998
Received
Air and
Radiation

The address and physical location of the solvent cleaning machine. The address is the same as shown above. Refer to the attached map for the actual physical location. This is referred to as vapor degreaser #2.

A list of the control equipment used to achieve compliance for each solvent cleaning machine. This machine is a vapor degreaser utilizing trichloroethylene as the degreasing solvent. Control equipment and methods are as follows: primary condensing coils, FRD (freeboard refrigeration device), freeboard ratio of 1.0, hoist with lifting speed limited to less than 11 feet per minute, device to shut off sump heat when vapors get too high, device to shut off sump heat when liquid level drops to coils, and reduced room draft.

List of control equipment required to be monitored, a list of the parameters that are monitored and the values of these parameters measured on or during the first month after the compliance date:

The control equipment and methods requiring monitoring are: the FRD, the hoist, and the reduced room draft. The parameters to be monitored are: temperature at the midpoint of the FRD blanket (must be less than 30% of solvent boiling point, i.e., must be less than 56.7 degrees F), lifting speed of the hoist (must be less than 11 FPM), and reduced room draft (velometer readings must show average air movement of less than 50 FPM).

The values of these parameters measured on or during the first month after the compliance date or at a later date (in which case an explanation is offered as a footnote) are shown in table form on the next page.

Prepared with the assistance of:

Milestones Environmental
3308 S. Knight
Wichita, KS 67217
(316) 529-4518

VAPOR DEGREASER #2

DATE	WEEKLY ROOM PARAMETERS	WEEKLY TPO AIR BLANKET TEMP (°F)	MONTHLY HOIST SPEED (<11 FT/MIN)	QUARTERLY WINDSPEED (<50 FT/MIN)
11/05/97				43
12/19/97	OK			
01/05/98	OK		9.40	
01/12/98	OK			
01/19/98	OK			
01/26/98	OK			
02/02/98	OK		9.30	
02/09/98	OK			
02/16/98	OK			
02/23/98	OK			
03/02/98	OK		9.20	46
03/09/98	OK			
03/16/98	OK			
03/23/98	OK	46.70		
03/30/98	OK	48.30		
04/06/98	OK	45.50	9.50	
04/13/98	OK	47.60		
04/20/98	OK	47.40		
04/27/98	OK	46.80		

* Temperature readings did not commence until March 23, 1998, because we were awaiting a ruling from John Ramsey, KDHE, on the appropriate point at which to take the reading.

Conditions to maintain the wind speed requirements of Sec. 63.463(e)(2)(ii).

Airspeed testing indicated air movement less than 50 feet per minute without any specific control of room parameters

Prepared with the assistance of:

Milestones Environmental
3308 S. Knight
Wichita, KS 67217
(316) 520-4510

ATTACHMENT 15

COMPLIANCE CHECKLIST FOR
BATCH VAPOR OR IN-LINE MACHINES
Halogenated Solvent Cleaning NESHAP

NOTE: This checklist will help determine whether a batch vapor or in-line (cold or vapor) machine is in compliance with the Halogenated Solvent Cleaning NESHAP.

1. GENERAL INFORMATION

- A. Cleaning machine ID No.: 142
- B. Installation Date:
- C. Machine is: New ☐ Existing ☒

2. MACHINE SIZE

Indicate the machine size based on whether the machine has a solvent-air interface.

- A. Solvent-air interface area: 28 m² or ft²
(Equal to the surface area of all cleaning sumps. $\Sigma (L_i \times W_i)$ = solvent-air interface)
OR if no solvent-air interface area
- B. Cleaning Capacity: m³ or ft³
(Equal to the product of internal width, length and depth of the tank. $IW \times IL \times D$ = cleaning capacity)

3. COMPLIANCE OPTION

Mark the compliance option chosen by owner/operator, and complete the checklist sections indicated for this option.

- A. Base design + work practices + control combination ☒
Complete sections 4, 5, 8 and 9
- B. Base design + work practices + idling emission limit ☐
Complete Sections 4, 6, 8 and 9
- C. Alternate standard (i.e., overall emission limit) ☐

[Note: This is the only option available for machines with no solvent-air interface.]

Complete Sections 7, 8 and 9

4. BASE DESIGN AND WORK PRACTICE REQUIREMENTS

Complete the tables below by filling in any required measurements, calculations, or observations, and check either "Yes" or "No" to document compliance.

A. Base Design Requirements:

The solvent cleaning machine must meet all criteria in the table to be in compliance.

Citation	Base Design Parameter	Measurement, Calculation, or Observation	In Compliance?	
			Yes	No
Compliance §63.463(a)(1)(i) §63.463(d)(1)(i) §63.463(e)(2)(iv)	Machine idling and downtime cover is tightly fitting; free of holes cracks, or other defects; and is in place when parts are not in the machine. ⁴	OK	X	
Monitoring §63.466(b)(1)	Cover is inspected <u>monthly</u> to ensure it is free of holes, cracks, or other defects. ⁵	Monitoring frequency: _____		
OR				
Compliance §63.463(a)(1)(ii), §63.463(e)(2)(ii)(A)	Room draft not exceeding 15.2 m/min (50 ft/min) ² .	Average wind speed: <u>48/45</u>	X	
Monitoring §63.466(d)	Room draft is monitored according to §63.466(d).	Room parameters or enclosure used?: <u>YES</u>	X	
Compliance §63.463(e)(2)(ii)(B)	Owner/operator established and maintains the operating conditions of testing. ¹	Monitoring frequency: <u>Quarterly</u>	X	
Compliance §63.463(a)(2)	Machine has a freeboard ratio of 0.75 or greater. Calculate by dividing freeboard height by the smallest interior freeboard width.	Freeboard ratio: <u>2.28</u> Freeboard height: <u>3</u> Interior width: <u>3.5</u>	2.28 X	

⁴ Exceedance has occurred if this requirement has not been met and is not corrected within 15 days of detection (§63.463(e)(3)(ii)).

⁵ Exceedance has occurred if this requirement has not been met (§63.463(e)(3)(i)).

A. Base Design Requirements (Continued):

Citation	Base Design Parameter	Measurement, Calculation, or Observation	In Compliance?	
			Yes	No
Compliance §63.463(a)(3) Monitoring §63.466(c)	Machine has an automated handling system, and it moves at a speed of 3.4 m/min (11 ft/min) or less. Determine hoist speed <i>monthly</i> (quarterly if no exceedances for year or otherwise approved by Administrator) by taking the distance and dividing by rate.	Handling speed: < 9.4 / < 9.5 Distance: _____ (m) Rate: _____ (min) Monitoring frequency: _____ X	X	
Compliance §63.463(a)(4)	Liquid level indicators to shut off sump heat are present and functioning for vapor machines.		X	
Compliance §63.463(a)(5)	Vapor level indicators to shut off sump heat are present and functioning for vapor machines.		X	
Compliance §63.463(a)(6)	Primary condenser present and functioning.		X	
Compliance §63.463(a)(7) Monitoring §63.466(e)(2)(vii)	Lip exhaust carbon adsorber (if applicable) exhaust must not exceed 100 ppm halogenated solvent. Carbon adsorber bed is not bypassed during desorption. Lip exhaust is above the cover.	Outlet concentration: _____ Solvent sampled: _____ _____	NA	

B. Work Practice Requirements:

The solvent cleaning machine must meet all criteria in the table to be in compliance.

Citation	Work Practice Requirement	Observation	In Compliance?	
			Yes	No
Compliance §63.463(d)(1)(i) §63.463(d)(1)(ii)	Control air disturbances across cleaning machine openings by (check one): <input checked="" type="checkbox"/> Keeping cover(s) in place during idling and downtime or <input type="checkbox"/> Room draft reduction		X	
Compliance §63.463(d)(2)	For open-top machines, ensure that parts or parts baskets do not occupy more than 50% of the solvent-air interface area, or introduce the parts or baskets at a speed of 0.9 m/min (3 ft/min) or less.	Solvent-air interface area: _____ Handling speed: _____ Distance: _____ Rate: _____		
Compliance §63.463(d)(3)	Perform all spraying operations within the vapor zone or within a section of the machine that is not directly exposed to ambient air.			
Compliance §63.463(d)(4)	Orient parts so that the solvent drains from them freely.			
Compliance §63.463(d)(5)	Remove parts or baskets only after dripping has stopped.			
Compliance §63.463(d)(6)	When starting up, turn on the primary condenser before the sump heater.			
Compliance §63.463(d)(7)	When shutting down, turn off sump heater before the primary condenser.			
Compliance §63.463(d)(8)	Add or drain solvent using threaded or other leak-proof couplings, and ensure that the end of the pipe or hose introducing solvent is located beneath the liquid solvent surface.			
Compliance §63.463(d)(9)	Maintain equipment as recommended by manufacturer or using approved alternate maintenance practices.			

NOT
OPERATION
DURING
INSPECTION

B. Work Practice Requirements:

Citation	Work Practice Requirement	Observation	In Compliance?	
			Yes	No
Compliance §63.463(d)(10)	Operators must complete and pass applicable sections of the Test of Solvent Cleaning Procedures (Appendix B of Part 63, Subpart T) if asked to do so by the inspector.	HAD TEST ATTACHED TO MACHINE		
Compliance §63.463(d)(11)	Collect and store waste solvent, still bottoms, and sump bottoms in closed containers.		X	
Compliance §63.463(d)(12)	Do not clean absorbent materials, such as sponges, fabric, wood, and paper, in the machine.		X	

5. CONTROL COMBINATIONS

A. Options for Batch Vapor Machines

Circle the Control Combination number in the table below that applies to this machine (§63.463(c)(1)-(2)). Then complete the compliance inspection information in the referenced sections.

Batch Vapor Cleaning Machine Size	Control Combination (circle the number that applies)	Control and Checklist Section to Complete:						
		Working Mode Cover	1.0 Freeboard Ratio	Super Heated Vapor	Freeboard Refrigeration	Reduced Room Draft	Carbon	Dwell
		C.1	C.2	C.3	C.4	C.5	C.6	C.7
Solvent-air Interface Area Less than or equal to 1.21 m ² (13 ft ²) [§63.463(b)(1)(i)]	1	✓	✓	✓				
	2			✓	✓			
	3	✓			✓			
	4		✓	✓		✓		
	5				✓	✓		
	6		✓		✓			
	7				✓			✓
	8		✓			✓		✓
	9				✓		✓	
	10		✓	✓			✓	
Solvent-air Interface Area Greater than 1.21 m ² (13 ft ²) [§63.463(b)(2)(i)]	1		✓	✓	✓			
	2				✓	✓		✓
	3	✓		✓	✓			
	4		✓	✓		✓		
	5			✓	✓	✓		
	6		✓		✓	✓		
	7			✓	✓		✓	

B. Options for In-line Machines

Circle the Control Combination number in the table below that applies to this machine (§63.463(c)(1)-(2)). Then complete the compliance inspection information in the sections for the applicable controls following this table and check either "Yes" or "No" to document compliance.

In-Line Cleaning Machine Type	Control Combination (circle the number that applies)	Control and Checklist Section to Complete:				
		1.0 Freeboard Ratio	Super Heated Vapor	Freeboard Refrigeration	Carbon Adsorber	Dwell
		C.2	C.3	C.4	C.6	C.7
Existing Machines [§63.463(c)(1)(i)]	1	✓	✓			
	2	✓		✓		
	3			✓		✓
	4				✓	✓
New Machines [§63.463(c)(2)(i)]	1		✓	✓		
	2			✓	✓	
	3		✓		✓	

C. Control Combination Requirements

C.1 Working Mode Cover

Citation	Working Mode Cover Parameter	Measurement, Calculation, or Observation	In Compliance?	
			Yes	No
Compliance §63.463(e)(2)(iii)(A)	Cover opens only during parts entry and removal and completely covers machine openings when closed.		X	
Compliance §63.463(e)(2)(iii)(B)	Cover is maintained free of cracks, holes, and other defects.		X	
Monitoring §63.466(b)(1)	Cover is inspected <i>monthly</i> to ensure it is free of holes, cracks, or other defects.		X	

C.2 Freeboard Ratio of 1.0

Citation	Freeboard Ratio Parameter	Measurement, Calculation, or Observation	In Compliance?	
			Yes	No
Compliance §63.463(c)(1)(i) §63.463(c)(2)(i)	Machine has a freeboard ratio of 1.0 or greater. Calculate by dividing freeboard height by the smallest interior freeboard width.	Freeboard ratio: <u>2.28</u> Freeboard height: <u> </u> Interior width:	X	

C.3. Superheated Vapor

(NA)

Citation	Superheated Vapor Parameter	Measurement, Calculation, or Observation	In Compliance?	
			Yes	No
Compliance §63.463(e)(2)(vi)(A)	Solvent vapor at the center of the superheated vapor zone must be heated to at least 10°F above the solvent boiling point (BP) ⁶ .	Temperature: _____ Solvent BP: _____ Temp. difference: _____		
Compliance §63.463(e)(2)(vi)(B)	Manufacturers specifications for determining proper dwell time are followed ⁷ .	Specification: _____ Dwell time: _____		
Compliance §63.463(e)(2)(vi)(C)	Parts must remain in the superheated vapor zone for minimum proper dwell time ⁴ .			
Monitoring §63.466(a)(2)	The temperature at the center of the superheated vapor zone must be measured and recorded <i>weekly</i> while the machine is idling (retain the records for 5 years).			

⁶Exceedance has occurred if this requirement has not been met and are not corrected within 15 days of detection (§63.463(e)(3)(ii)).

⁷Exceedance has occurred if this requirement has not been met (§63.463(e)(3)(i)).

C.4 Freeboard Refrigeration

Citation	Freeboard Refrigeration Parameter	Measurement, Calculation, or Observation	In Compliance?	
			Yes	No
Compliance §63.463(e)(2)(i)	Air in the freeboard must be at a temperature no greater than 30 percent of the solvent boiling point (in °F) ³ .	Solvent BP (°F): <u>189</u> Temp (°F): <u>51/18</u> Temp. As % of BP: <u>< 57°F</u>	X	
Monitoring §63.466(a)(i)	The air blanket temperature above the vapor zone must be measured and recorded <i>weekly</i> while the machine is idling (retain the records for 5 years).		X	

C.5 Reduced Room Draft

Citation	Reduced Room Draft Parameter	Measurement, Calculation, or Observation	In Compliance?	
			Yes	No
Compliance §63.463(e)(2)(ii)(A)	The average windspeed in the room or enclosure is less than or equal to 15.2 m/min (50 ft/min).	Average windspeed: <u>78 / 15</u>		
Compliance §63.463(e)(2)(ii)(B)	Owner/operator established and maintains the operating conditions of testing.		X	
Monitoring (room parameters) §63.466(d)(1)	Windspeed is measured and recorded <i>quarterly</i> . Room conditions established during testing are monitored <i>weekly</i> .		X	
Monitoring (enclosure) §63.466(d)(2)	Windspeed is measured and recorded <i>monthly</i> . Enclosure conditions is monitored <i>monthly</i> .	NA	X	

³Exceedance has occurred if this requirement has not been met and are not corrected within 15 days of detection (§63.463(e)(3)(ii)).

C.6 Carbon Adsorber (with Lip Exhaust)

NA

Citation	Carbon Adsorber Parameter	Measurement, Calculation, or Observation	In Compliance?	
			Yes	No
Compliance §63.463(e)(2)(vii)(A)	Halogenated solvent concentration in the exhaust does not exceed 100 ppm using colorimetric detector tube. ⁵	Concentration: _____ Solvent tested: _____		
Compliance §63.463(e)(2)(vii)(B)	The carbon bed cannot be bypassed during desorption. ⁶			
Compliance §63.463(e)(2)(vii)(C)	The lip exhaust must be located above the cover. ⁶			
Monitoring and Recordkeeping §63.466(e) §63.467(b)(4)	The exhaust concentration of the halogenated solvent must be measured and recorded <i>weekly</i> . (retain the records for 5 years).			

⁵Exceedance has occurred if this requirement has not been met and are not corrected within 15 days of detection (§63.463(e)(3)(ii)).

⁶Exceedance has occurred if this requirement has not been met (§63.463(e)(3)(i))

C.7 Dwell

NA

Citation	Dwell Parameters	Measurement, Calculation, or Observation	In Compliance?	
			Yes	No
Compliance §63.463(e)(2)(v)(A)	Determine the proper or maximum dwell time for each type of part or parts basket to be cleaned. ⁶	Proper dwell time recorded (sec) _____		
Compliance §63.463(e)(2)(v)(B)	Ensure that parts are held in the freeboard area above the vapor zone for the proper dwell time. ⁶			
Test Methods §63.465(d)(1)	Determine the amount of time for the parts to cease dripping once placed in the vapor zone.	Actual measured dwell time (sec) _____		
Test Methods §63.465(d)(2)	Proper dwell time for parts to remain in the freeboard area above the vapor zone is no less than 35% of the actual dwell time.	% of actual dwell time: _____		
Monitoring §63.466(b)(2)	Actual dwell time must be measured and recorded <i>monthly</i> .			
Recordkeeping §63.467(a)(3)	Retain records of the tests to determine proper dwell time for the lifetime of the machine.			

⁶Exceedance has occurred if this requirement has not been met (§63.463(e)(3)(i))

6. IDLING EMISSION LIMIT

NA

Complete the tables below by filling in any required measurements, calculations, or observations, and check either "Yes" or "No" to document compliance.

Citation	Idling Parameters	Measurement, Calculation, or Observation	In Compliance?	
			Yes	No
Compliance (batch vapor) §63.463(f)(1)(i) §63.463(b)(1)(ii) §63.463(b)(2)(ii)	Demonstrate that the <i>batch vapor</i> machine can meet an emission limit of 0.22 kg/hr-m ² (0.045 lbs/hr-ft ²) of solvent-air interface area when idling. ⁷			
Compliance (in-line) §63.463(f)(1)(i) §63.463(c)(1)(ii) §63.463(c)(2)(ii)	Demonstrate that the <i>in-line</i> machine can meet an emission limit of 0.10 kg/hr-m ² (0.021 lbs/hr-ft ²) of solvent-air interface area when idling. ⁷			
Test Methods §63.465(a)	Determine idling emission rate using Reference Method 307 (in Appendix A of Subpart T).			
Compliance §63.463(f)(1)(ii)	Establish operating parameters to demonstrate compliance. For example, if a control from the Control Combination section of the rule was used, the requirements for that control must be followed. ⁷	Periodic monitoring of parameters selected: _____ Parameters machine is operated within: _____		
Compliance §63.463(f)(2)	Conduct periodic monitoring to demonstrate compliance. ⁷	Frequency of monitoring performed: _____ Type of monitoring: _____		

⁷Exceedance has occurred if this requirement has not been met. Determine if exceedance of parameters are classified as an immediate exceedance or whether a 15-day repair period would be allowed (§63.463(f)(4)(i)-(ii)).

6. IDLING EMISSION LIMIT (Continued)

Citation	Idling Parameters	Measurement, Calculation, or Observation	In Compliance?	
			Yes	No
Compliance §63.463(f)(3)	Operate machine within parameters identified in the initial performance test. ⁸			
Recordkeeping §63.467(a)(4)	Retain the results of the initial test, including the idling emission rate and values of monitoring parameters measured, for the life of the machine.			
Monitoring §63.466(f)	If using a control from the Control Combinations list, monitoring requirements for that control must be followed <u>or</u> alternative monitoring must be approved by the Administrator			

⁸Exceedance has occurred if this requirement has not been met. Determine if exceedance of parameters are classified as an immediate exceedance or whether a 15-day repair period would be allowed (§63.463(f)(4)).

7. **ALTERNATIVE STANDARD (Overall Emission Limit)**

NA

Complete one of the sections below based on whether the machine being inspected has a solvent-air interface. Check "Yes" or "No" to document compliance.

A. Machines with Solvent-air Interface

NOTE: For machines with solvent-air interface areas, compliance requirements depend on machine type and whether the machine is existing or new.

Citation	Solvent-air Interface Alternative Standard Parameters	Measurement, Calculation, or Observation	In Compliance?	
			Yes	No
Compliance §63.464(a)(1)(ii)	For a <i>batch vapor machine</i> , the 3-month rolling average emissions of listed solvent from the machine, calculated monthly, must not exceed 150 kg/m ² -month (30.7 lbs/ft ² -month). ⁹	Rolling Average: _____		
Compliance §63.464(a)(1)(ii)	For an <i>existing in-line machine</i> , the 3-month rolling average emissions of listed solvent from the machine, calculated monthly, must not exceed 153 kg/m ² -month (31.4 lbs/ft ² -month). ¹⁰	Rolling average: _____		
Compliance §63.464(a)(1)(ii)	For a <i>new in-line machine</i> , the 3-month rolling average emissions of listed solvent from the machine, calculated monthly, must not exceed 99 kg/m ² -month (20 lbs/ft ² month). ¹¹	Rolling average: _____		
Compliance §63.464(a)(1)(i) Recordkeeping §63.467(c)(1)-(2)	Maintain records (dates and amounts) of solvent added to the machine and solvent and waste removed from the machine (retain records for 5 years).			

⁹Exceedance has occurred if this the 3-month rolling average emission limit has not been met(§63.464(c)).

¹⁰Exceedance has occurred if this the 3-month rolling average emission limit has not been met(§63.464(c)).

¹¹Exceedance has occurred if this the 3-month rolling average emission limit has not been met(§63.464(c)).

A. Machines with Solvent-air Interface (Continued)

Citation	Solvent-air Interface Alternative Standard Parameters	Measurement, Calculation, or Observation	In Compliance?	
			Yes	No
Compliance §63.464(b)	Maintain records of calculations of monthly and 3-month rolling average emissions on a monthly basis (retain records for 5 years).			
Recordkeeping §63.467(c)(3)				
Test Methods §63.465(b)	On the first day of every month, ensure that the machine contains only clean solvent.			
Test Methods §63.465(b)	Return the solvent each month to the fill line established during the first month the measurements were made.			
Test Methods §63.465(c)	Determine solvent emissions on the first operating day of each month.			

B. Machines without Solvent-air Interface

NOTE: For machines without solvent-air interface areas, compliance requirements depend on the cleaning capacity of the machine.

Citation	Alternative Standard Parameters (No Solvent-air Interface)	Measurement, Calculation, or Observation	In Compliance?	
			Yes	No
Compliance §63.464(a)(2)(ii)(A)	For machines with a <i>cleaning capacity less than or equal to 2.95 m³</i> , the monthly emissions must not exceed the emission limited determined using use either Table 6 or Equation 1 of 40 CFR 63.464. ¹²	Monthly emissions: Emission limit determined by:		
Compliance §63.464(a)(2)(ii)(B)	For machines with a <i>cleaning capacity greater than 2.95 m³</i> , the monthly emissions must not exceed the emission limit determined using Equation 1 of 40 CFR 63.464. ¹¹	Monthly emissions:		
Compliance §63.464(a)(1)(i) Recordkeeping §63.467(c)(1)-(2)	Maintain records (dates and amounts) of solvent added to the machine and solvent and waste removed from the machine (retain records for 5 years).			
Compliance §63.464(b) Recordkeeping §63.467(c)(3)	Maintain records of calculations of monthly and 3-month rolling average emissions on a monthly basis (retain records for 5 years).			
Test Methods §63.465(b)	On the first day of every month, ensure that the machine contains only clean solvent.			
Test Methods §63.465(b)	Return the solvent each month to the fill line established during the first month the measurements were made.			
Test Methods §63.465(c)	Determine solvent emissions the first operating day of each month.			
Recordkeeping §63.467(d).	Maintain records on the method used to determine cleaning capacity (retain for 5 years).			

¹²Exceedance has occurred if this the 3-month rolling average emission limit has not been met (§63.464(c)).

8. GENERAL TESTING AND RECORD KEEPING REQUIREMENTS

A. Potential to Emit

Determine the potential to emit from all solvent cleaning operations at the facility (§63.465(e)).

Potential to emit (kg/yr) 7

{PTE_i = (annual hours of operation)_i x (working mode emission rate, kg/m²-hr)_i x (SAI, m²)_i; SAI = 2.20 x (Vol, m³)^{0.6} for machines with no solvent-air interface; SAI = solvent-air interface area, Vol = cleaning capacity}

Permit limit (kg/yr) / (if applicable)

B. Records Retained For Lifetime of Machine

Are the following maintained by the owner/operator?:

- Owner's manual or written maintenance and operating procedures for the solvent cleaning machine and control equipment (§63.467(a)(1)):

Yes ☒ No ☐ Comment: _____

- The date of installation for the solvent cleaning machine and all control devices. (If exact date is unknown, a letter certifying that the machine and controls were installed prior to, on, or after 11/29/93 can be substituted) (§63.467(a)(2)):

Yes ☒ No ☐ Comment: _____

- Halogenated HAP solvent content for each listed solvent used in the machine (§63.467(a)(5)):

Yes ☒ No ☐ Comment: _____

C. Records Retained For 5 Years

Does the owner/operators using control combination or idling emission limit, maintain estimates of annual solvent consumption for the machine (§63.467(b)(3)):

Yes ☒ No ☐ Comment: _____

9. REPORTING REQUIREMENTS

<u>For:</u>	<u>Complying with:</u>	<u>Complete:</u>
New machines	Control combination or idling emission limit	(A) and (C)
New machines	Overall emission limit (i.e., alternative standard)	(A) and (D)
Existing machines	Control combination or idling emission limit	(B) and (C)
Existing machines	Overall emission limit (i.e., alternative standard)	(B) and (D)

A. Initial Notification Requirements for New Machines:

NA

Notification Type/ Citation	New Machine Reporting Parameters	Observation/ Date	In Compliance?	
			Yes	No
Initial Notification §63.468(b)	If construction or reconstruction had commenced but initial startup had not occurred before 12/2/94, an <i>initial notification report</i> was submitted before startup, but no later than 1/31/95.	Construction: _____ Startup: _____ Notification: _____		
Initial Notification §63.468(b)	If construction or reconstruction began or will begin after 12/2/94, an <i>initial notification report</i> has been submitted as soon as possible before starting construction or reconstruction of the machine.	Construction: _____ Startup: _____ Notification: _____		

Does the *initial notification report* for the new machine comprise the following (§63.468(b)(1)-(3)):

- Description of machine, including type, solvent-air interface area and existing controls: Yes ☐ No ☐
- Anticipated compliance approach: Yes ☐ No ☐
- Estimate of annual halogenated solvent consumption for each cleaning machine: Yes ☐ No ☐

B. Initial Notification Requirements for Existing Machines:

Initial notification for existing machines are based on a fixed date. Complete the table below by checking either "Yes" or "No" to document compliance.

Notification Type/ Citation	Existing Machine Reporting Parameter	Observation/ Date	In Compliance?	
			Yes	No
Initial Notification §63.468(a)	An <i>initial notification</i> report was submitted no later than 8/29/95.	Notification: _____	X	

Did the *initial notification report* for existing sources comprise the following (§63.468(a)(1)-(6)):

- Owner/operator name and address: Yes ☐ No ☐
- Address (i.e., physical location of machine): Yes ☐ No ☐
- Description of machine, including type, solvent-air interface area and existing controls: Yes ☐ No ☐
- Installation date of the machine or letter certifying installation before or after 11/29/93: Yes ☐ No ☐
- Anticipated compliance approach: Yes ☐ No ☐
- Estimate of annual halogenated solvent consumption: Yes ☐ No ☐

C. Reporting Requirements with Control Combinations and Idling Emission Limit

Notification Type/ Citation	Control and Idling Emission Reporting Parameter	Observation/ Date	In Compliance?	
			Yes	No
Initial Statement of Compliance (New) §63.468(d)	For new sources, an <i>initial statement of compliance</i> has been submitted no later than 150 days <u>after</u> startup or 5/1/95, whichever is later.	Notification: <u>5/1/95</u>	X	
Initial Statement of Compliance (Existing) §63.468(d)	For existing sources, an <i>initial statement of compliance</i> has been submitted no later than May 1, 1998 (150 days after 12/2/97).	Notification: <u>5/1/95</u>	X	
Annual Report §63.468(f)	An <i>annual report</i> must be submitted by February 1 of the year following the one for which the report is being made.	<u>Due 2/1/99</u>		
Exceedance Report §63.468(h)	An <i>exceedance report</i> must be submitted semiannually unless it is determined that more frequent reporting is necessary to accurately assess compliance status.	Reporting frequency: <u>7/28/98</u>	X	

ATTACHMENT 16

CHROMIUM ELECTROPLATING INSPECTION FORM

Facility: Air Capitol Plating AIRS No.: _____
 Address: 1702 S. Knight
 City: Wichita State: KS Zip: _____

Contact/Title: Curt Howell Phone Number: _____

Owner/Operator/Title: Thayer Corp.
 Address: _____
 City: Wichita State: _____ Zip: _____

Inspector: Beatty/Higbee Date: 1/13/99

Type of source:

Major: Yes ☒ No ☐ (PTE ≥ 10 TPY single HAP or 25 TPY combination HAPS)

For hard chrome: Small ☐ (Max. rectifier cap. < 60 million amp-hrs/yr)

Large ☐ (Max. rectifier cap. ≥ 60 million amp-hrs/yr)

Tank ID #	Tank Type ¹	Startup Date	Volume (gal)	Type of Parts Plated	Tank Amp Capacity	Control Device ²	
<u>6</u>	<u>A</u>	<u>11/1/79</u>	<u>1450</u>	<u>aircraft</u>	<u>2500</u>	<u>PBS</u>	

1 Tank Type: hard(H); decorative: hexavalent(DH), trivalent(DT); anodizing(A).

2 Control Device: composite mesh pad (CMP), packed-bed scrubber (PBS), fiber-bed mist eliminator (FBME), fume suppressant (FS), other (O).

Control Equipment Manufacturer/Vendor: Viron

Make, Model, Serial or ID #: VHE 1025

Bath Composition: CrO₃ 10 %, DI H₂O 90 %, Temperature: _____ °C (_____ °F).

Capacity (norm/max): 10 / 20 hrs/day, 1 / 2 shifts/day, 6 / 6 days/week,

1K / 2K # pieces/day, 1K / K # pieces/shift.

RECORDKEEPING REQUIREMENTS (Keep 5 years)

Does the facility keep these records?	<u>Yes</u>	<u>No</u>	<u>NA</u>
1. Inspection and Maintenance records? (process, control equipment, monitoring equipment)	<u>X</u>	—	—
2. Malfunction records? (process, control equipment, monitoring equipment)	—	<u>X</u>	—
3. Performance test results? (if conducted) 7/29+8/1 1997	<u>X</u>	—	—
4. Excess emissions records?	<u>X</u>	—	—
5. Process records:			
a. All tanks: operating time?	—	<u>X</u>	—
b. Hard chrome (small): Actual rectifier capacity/month?	—	—	<u>X</u>
Total rectifier capacity? (Major-semiannual, area-annual)	—	—	<u>X</u>
c. Decorative (trivalent) chrome: Bath component purchases (w/ wetting agent)?	—	—	<u>X</u>
d. Decorative (hexavalent) chrome: Fume suppressant additions?	—	—	<u>X</u>
6. Operations and maintenance (O & M) plan?	<u>X</u>	—	—

REPORTING

Has the facility submitted these reports?	<u>Yes</u>	<u>No</u>	<u>NA</u>	<u>Records Avail(Y/N)</u>
1. Initial notification? (Due 7/24/95)	<u>X</u>	—	—	—
2. Notification of construction/reconstruction? (After 1/25/95, due at startup)	—	—	<u>X</u>	—
3. Notification of performance test? (If conducted) (Due at least 60 days prior to test)	—	—	<u>X</u>	—
4. Notification of compliance status? (Due within 90 days after test or within 30 if no test required)	<u>X</u>	—	—	—
5. Ongoing compliance status reports? (Major-every 6 months; Area-annually, retain onsite)	<u>X</u>	—	—	—

CONTROL TECHNOLOGY MONITORING (Mark (X) if applicable)

Is facility performing the following?

Records
Yes No Avail (Y/N)

1. () Composite Mesh Pad (CMP)

- Visually inspect pad, duct work (1/quarter)?
- Perform washdown of pads per manufacturer?
- Pressure drop monitored daily?
- Pressure drop: _____ inches of water
(during test: _____ ±1 inches of water)

2. (X) Packed-bed Scrubber (PBS)

- Visually inspect packed bed, mist eliminator, duct work (^{weekly}1/quarter)?
- Add fresh makeup water?
- Pressure drop monitored daily?
- Pressure drop: 1.3 inches of water
(during test: 1.05 ±1 inches of water)
- Velocity pressure monitored daily?
- Velocity pressure: 0.27 inches of water
(during test: 0.265 ±10% inches of water)

X _____
X _____
X _____

X _____

3. () CMP/PBS (Same as CMP)

4. () Fiber-bed mist eliminator (FBME)

- Visually inspect fiber-bed, pre filter, duct work (1/quarter)?
- Perform washdown of fiber element per manufacturer?
- Pressure drop monitored daily?
- Pressure drop: _____ inches of water
(during test: _____ ±1 inches of water)

5. () Wetting agent

- Surface tension monitored every 4/8/40 hours?
(≤ 45 dynes/cm or tested)
- Wetting agent name _____
- Surface tension measuring device _____
- How measured? _____

6. () Foam blanket

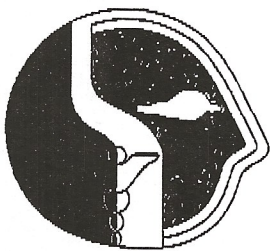
- Thickness monitored every 1/4/8 hour?
(≥ 1 inch or tested)
- How measured? _____

(attach additional sheets if needed)

re: Paula Hoghee

_____, Date 2/1/97

ATTACHMENT 17



September 3, 1998

Kurt Howell, Compliance Manager
Air Capitol Plating, Inc.
1702 So. Knight
Wichita, Kansas 67213

P/N 1730152

Dear Sir:

On September 1, 1998, a representative of the Wichita-Sedgwick County Department of Community Health, acting as a designated agent for the Kansas Department of Health and Environment, conducted an annual inspection of your Electroplating and Spray painting Facility located in Wichita, Kansas to observe whether the facilities were continuing to be operated in compliance with the Kansas air pollution emission control regulations.

At the time of the inspection, no violations of Kansas air quality regulations of your permit in the areas inspected were observed.

K.A.R. 28-19-11 provides exemption from applicable regulation emission limitations when the limitations are exceeded due to equipment malfunction or scheduled maintenance. Exemption will be considered if the Department is notified in writing within 10 days of such occurrence. Should your facilities be observed in violation of applicable regulations which occurred as a result of equipment malfunction or maintenance, enforcement proceedings would be initiated unless the Department has been notified in accordance with the provisions of K.A.R. 28-19-11.

You are required to notify the Department in writing if new processing equipment is to be installed or if modifications are to be made to the plant or the way the plant is operated. The Department is to be notified of any such additions or modifications at least 90 days prior to the initiation of any alteration.

In Addition, this facility is also subject to the following Federal regulations:

- 1.) Spray painting operations- 40 CFR 63 Subpart GG
- 2.) Chrome anodizing tank- 40 CFR 63 Subpart N
- 3.) Degreasers- 40 CFR 63- Subpart T

Include your air quality permit number in any correspondence with the Department. Should you have any questions regarding these matters, please contact me at 268-8448.

Sincerely,

Randy Owen, Environmental Quality Specialist
cc: Bureau of Air Quality- Topeka

Wichita-Sedgwick County Department of Community Health

1900 East Ninth Street-Wichita, Kansas 67214-3198 • (316) 268-8351 • Fax (316) 268-8390

Source Type ☐ ☐
Action Type ☐ ☐ Results Code ☐ ☐ Staff Code K ☐ ☐ Date Achieved ☐ ☐ ☐ ☐ ☐ ☐
Y Y M M D D

Kansas Department of Health and Environment

Air Pollution Source Inspection

Permit Number	Source Type	Applicable Regulations
1730152	A1	28-19-41(B) & 50(B), Subparts N, T, & GG
Company Name: Air Capitol Plating		Plant Location: Sedgwick County
Plant Address: 1702 So. Knight		City: Wichita State: Ks. Zip: 67213 Phone: (316) 943-0731
Contact Person: Dan Drake , Quality Assurance Manager		Curt Howell Compliance Mgr
Persons Interviewed		Inspection Level
Name Title		L1 <input checked="" type="radio"/> L2 <input type="radio"/> Other <input type="radio"/>
1) Curt Howell Comp. Mgr.		Type of Inspection
2)		(A) RI EI Comp. Other
3)		Date of Inspection 9/1/1998

Routine Questions:

- 1) Any modifications made since last inspection? Y If yes, were they reported? Y
2) Any plan to modify the facility next year? N
3) Any major malfunctions last year? N
If yes, were they reported within 10 days? N/A
4) Does the facility have and follow regularly scheduled maintenance plan? Y
5) Has the production rate changed? N

Comments:

Inspector: 

Air Pollution Source Inspection (Opacity)

Permit Number: 1730152

Company Name

Air Capitol Plating

Item No.	Source Description	Operating Conditions	Applicable Regulations	Opacity Limit	Opacity Observation
1.	Cadium plating (2-830 ga. tanks)	----	28-19-50(B)	20%	0
2.	Cad/Titanium plating(420 ga. tank)	----	28-19-50(B)	20%	0
3.	Copper plating (mini tank)	----	28-19-50(B)	20%	0
4.	Paint Room #1:				
	Booth #1	2 stage dry filter	28-19-50(B)	20%	0
	Booth #2	" " "	28-19-50(B)	20%	0
	Booth #3	" " "	28-19-50(B)	20%	0
	Booth #4	" " "	28-19-50(B)	20%	0
5.	#1 vapor cleaning machine	----	NESHAPS	20%	0
6.	#2 batch vapor machine	----	NESHAPS	20%	0
7.	Passivate line	Scrubber	28-19-50(B)	20%	0
8.	Paint solvent cleaning	Vent	28-19-50(B)	20%	0
9.	Paint Room #3:				
	Booth #1	2 stage dry filter	28-19-50(B)	20%	0
	Booth #2	" " "	28-19-50(B)	20%	0
	Booth #3	" " "	28-19-50(B)	20%	0
10.	ACE Model 240-RKG incinerator	Afterburner	28-19-41(B)	20%	5
11.	Developer exhaust	Vent	28-19-50(B)	20%	0
12.	Chrome solvent cleaning	Vent	28-19-50(B)	20%	0
13.	Paint Room #2				
	Booth #1	2 stage dry filter	28-19-50(B)	20%	0
	Booth #2	" " "	28-19-50(B)	20%	0
	Booth #3	" " "	28-19-50(B)	20%	0
*Ref: NPL 97-93, these booths are subject to Subpart GG					
14.	Chrome anodize tank capacity 1450 ga.	Fume suppressant & packed bed scrubber	Subpart N	20%	0

15) ~~Paint booths 8, 9, 10~~

~~Paint booths 8, 9, 10~~

~~Paint booths 8, 9, 10~~

CHROMIUM ELECTROPLATING INSPECTION FORM

Facility: Air Capital Plating AIRS No.: 1730152
Address: 102 S Knight
City: Wichita State: KS Zip: 67213
Contact/Title: Kurt Howell Phone Number: 943-0731
Owner/Operator/Title: Kurt Howell
Address: Same
City: Same State: Same Zip: Same
Inspector: [Signature] Date: 9/1/98
Type of source:
Major: Yes X No (PTE \geq 10 TPY single HAP or 25 TPY combination HAPS)

For hard chrome: Small (Max. rectifier cap. \leq 60 million amp-hrs/yr)
Large (Max. rectifier cap. \geq 60 million amp-hrs/yr)

Tank ID #	Tank Type ¹	Startup Date	Volume (gal)	Type of Parts Plated	Tank Amp Capacity	Control Device ²	
6	A	11/79	1450	aircraft	2500	PBS	

1 Tank Type: hard(H); decorative: hexavalent(DH), trivalent(DT); anodizing(A).

2 Control Device: composite mesh pad (CMP), packed-bed scrubber (PBS), fiber-bed mist eliminator (FBME), fume suppressant (FS), other (O).

Control Equipment Manufacturer/Vendor: VIRON

Make, Model, Serial or ID #: VHE 1025

Bath Composition: 70% Cr 30% H₂SO₄ 70% H₂SO₄ 30% H₂SO₄

Capacity (gallons): 1450 1450 1450 1450

1000 1000 1000 1000

RECORDKEEPING REQUIREMENTS (Keep 5 years)

Does the facility keep these records?

1. Inspection and Maintenance records?
(process, control equipment, monitoring equipment)
2. Malfunction records?
(process, control equipment, monitoring equipment)
3. Performance test results? (if conducted)
4. Excess emissions records?
5. Process records:
- a. All tanks: operating time?
- b. Hard chrome (small):
Actual rectifier capacity/month?

Total rectifier capacity?
(Major-semiannual, area-annual)
- c. Decorative (trivalent) chrome:
Bath component purchases (w/ wetting agent)?
- d. Decorative (hexavalent) chrome: Fume suppressant additions?
6. Operations and maintenance (O & M) plan?

Yes No NA

X — —X — —X — ~~NA~~ N/A— — N/A— — N/A— — N/A— — N/A— — N/AX — —REPORTING

Has the facility submitted these reports?

1. Initial notification?
(Due 7/24/95)
2. Notification of construction/reconstruction?
(After 1/25/95, due at startup)
3. Notification of performance test? (If conducted)
(Due at least 60 days prior to test)
4. Notification of compliance status?
(Due within 90 days after test or within 60 if no test required)
5. Ongoing compliance status reports?
(Major-every 6 months; Area-annually, retain onsite)

Yes No NA Records Avail(Y/N)

X — — ✓— — — ✓X — — ✓X — — ✓X — — ✓X — — ✓

CONTROL TECHNOLOGY MONITORING (Mark (X) if applicable)

Is facility performing the following?

		Records
<u>Yes</u>	<u>No</u>	<u>Avail (Y/N)</u>

1. () Composite Mesh Pad (CMP)

- Visually inspect pad, duct work (1/quarter)?
- Perform washdown of pads per manufacturer?
- Pressure drop monitored daily?
- Pressure drop: _____ inches of water
(during test: _____ \pm 1 inches of water)

- ## 2. () Packed-bed Scrubber (PBS)

- Visually inspect packed bed, mist eliminator, duct work (1/quarter)?
- Add fresh makeup water?
- Pressure drop monitored daily?
- Pressure drop: 1.04 inches of water
(during test: 1.05 \pm 1 inches of water)
- Velocity pressure monitored daily?
- Velocity pressure: .24 inches of water
(during test: .235 \pm 10% inches of water)

A grid of 10 small squares, arranged in 5 rows and 2 columns. Each square contains a handwritten checkmark. The checkmarks are drawn in a consistent, slanted style, indicating that all items in the list have been completed or verified.

3. () CMP/PBS (Same as CMP)

4. () ~~Fiber-bed mist eliminator (FBME)~~

- Visually inspect fiber-bed, pre filter, duct work (1/quarter)?
- Perform washdown of fiber element per manufacturer?
- Pressure drop monitored daily?
- Pressure drop: _____ inches of water
(during test: _____ \pm 1 inches of water)

Figure 1 shows a 3x3 grid of nine photographs of a tooth, illustrating the progression of a toothbrush stain. The stains are arranged in a grid, showing increasing size and darkness from the top-left to the bottom-right.

5. () Wetting agent

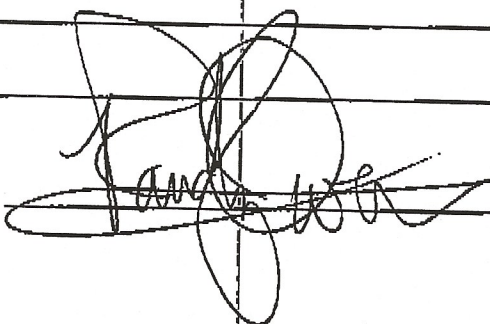
- Surface tension monitored every 4/8/40 hours?
(≤ 45 dynes/cm or tested)
 - Wetting agent name _____
 - Surface tension measuring device _____
- How measured? _____

6. () Foam blanket

- ~~• Thickness monitored every 1/4/8 hour?
(≥ 1 inch or tested)
How measured?~~

COMMENTS

(attach additional sheets if needed)

Coordinator's Signature:
(Cr-inspe.1:3/3/97)

Date

9/1/98